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2001 Western Washington Exotic Pest Detection Survey; A Pheromone-trap Survey for *Proeulia spp.* (Lepidoptera: Tortricidae)

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Background

Tortricid moths are important pests of many crops in the U.S. and worldwide. The genus *Proeulia*, which is indigenous to Chile and Argentina, includes several pests of tree fruit, grapes, and many other crops grown in the Pacific Northwest. Both the Canadian Department of Food and Agriculture and U.S. Department of Agriculture regulate commodities imported from South America to exclude *Proeulia spp.* pests, which have never been found in North America. While the volume of fresh market commodities imported from South America, and Chile in particular, has increased in recent years, detection surveys for introduced *Proeulia* pests have not been conducted.

2001 Project Objective

Conduct a preliminary, pheromone-trap based detection survey for *Proeulia spp.* in western Washington.

Project Methods and Materials

Four hundred and fifty-six pheromone-lure baited traps were placed in counties along the Interstate-5 corridor in western Washington, from the Canadian border south to Clark county on the Columbia River / Oregon border. Trap placement, by county, is presented in Table 1. Traps were hung in roadside or residential yard fruit trees, primarily apple and cherry varieties.

Trap placement began in May, to allow for completion of all initial trap sets by the beginning of expected adult moth flight in late-June or early-July, and most traps were removed by the end of July.

Pherocon 2® type traps (a.k.a. "diamond" traps) were used in this survey, based on trap performance in prior WSDA CAPS surveys, ease of use, and the avoidance of small-bird capture/mortality (which is a problem with other trap designs, particularly “wing-traps”). Traps were baited with pheromone-lures provided by the USDA APHIS Otis Methods Development Center. The *Proeulia spp.* pheromone-lures consisted of gray rubber septa (West Co., Lionville, PA. cat. no. 1060-0275), each loaded with 0.1 ml (1 mg) of (E)-11-Tetradecen-1-ol (ISCA Technologies, Inc., Riverside, CA).

Pheromone lures were changed every two weeks as much as possible during the expected (probable) period of adult flight. Traps with specimens were processed at the Olympia Entomology Lab, where specimens present were identified and counted. Selected specimens were removed from the traps with Hemo-D citrus based solvent and had genitalia extracted and cleared (in KOH) for identification.

Project Results

No *Proeulia spp.* specimens were collected in this survey.

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